

ABSTRACT OF THE DISCLOSURE

A static tie switch (10) designed to provide the upmost in reliable power to critical equipment, such as communications and computing equipment. The switch
5 uses solid state devices, wherever possible, and preferable uses silicon controlled rectifiers (SCR)s (30) to tie corresponding phases of multiple buses (12,14) together. In the preferred embodiment, the switch (10) broadly comprises three pairs of SCRs (30), one pair for each phase, and a controller (32) to control the SCRs (30). The SCRs (30) can be triggered or biased to selectively allow current to flow between the
10 buses (12,14), thereby allowing a first source (16) to power both a first load (18) and a second load (22). Similarly, the SCRs (30) can be triggered to selectively allow a second source (20) to power both the first load (18) and the second load (22).